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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,346	06/05/2006	Ole Olsen	HOI-14502/16	8797
25006 7590 11/17/2009 GIFTORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021				
EXAMINER KURTZ, BENJAMIN M				
ART UNIT		PAPER NUMBER		
1797				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,346

Applicant(s)

OLSEN ET AL.

Examiner

BENJAMIN KURTZ

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 107-110, 112-117, 119-121, 123-125 and 127-136 is/are pending in the application.
- 4a) Of the above claim(s) 127-130 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 107-110, 112-117, 119-121, 123-125 and 131-136 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-646)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 107-110, 112-117, 119-121, 123-125, 127-136 are currently pending;
claims 1-109, 111, 118, 122 and 126 are cancelled and claims 127-130 are withdrawn.

Election/Restrictions

1. Applicant's election with traverse of group I in the reply filed on 8/31/09 is acknowledged. The traversal is on the ground(s) that there is unity between the inventions recited in claims 131 and 127. This is not found persuasive because the inventions do not share one or more of the same or corresponding special technical features. Claim 127 recites a method for utilizing a filter according to claim 131, so claim 127 recites all of the limitations of claim 131. However, claim 131 does not have a special technical feature as the apparatus of claim 131 does not have a technical feature that defines a contribution which the claimed invention makes over the prior art. Because claim 131 does not have a special technical feature, claims 131 and 127 do not share a special technical feature and the restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 134 is objected to because of the following informalities: There appears to be a typographical error in line 2 of the claim and the claim is assumed to recite "said pores". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 107-110, 112-117, 119-121, 123-125 and 131-136 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 131 and 135 recite the upstream zone being with no barrier to liquid to be filtered and claim 136 recites not providing the filter with a liquid impermeable layer around the filtration area of the layers of the first filtration medium and the layers of the spacer medium. The specification does not teach the invention must include the absence of a barrier to liquid or the absence of a liquid impermeable layer. Applicant cites pg. 43, lines 8-10 as reciting such a feature. The cited passage only teaches the liquid to be filtered enters the filtration material through the filtering area of the at least

one outer layer of filtration medium and/or through said edge of said at least one outer layer of filtration medium and/or between two adjacent edges of layers of filtration medium. There is no teaching of there being no barrier to liquid or an explicitly recitation of no liquid impermeable layer around the filter layers.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 107, 108, 110, 112, 113, 115-117, 119, 120, 125 and 131-136 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunter US 2 537 897.

Claims 131 and 135, Hunter '897 teaches a filter house having at least one filter cartridge with a filter, the filter comprising: a plurality of layers of a first filtration medium, each layer having a filtration area and at least one edge, a plurality of layers of a spacer medium, each layer having a filtration area and at least one edge, wherein, the layers of the first filtration medium and spacer medium are positioned alternately and with the filtration area of the layers of first filtration medium and spacer medium faced towards each other, a downstream zone of at least one layer of first filtration medium, positioned downstream in relation to the plurality of layers of spacer medium, a most

upstream zone of spacer medium or filtration medium, where a most upstream filtration area or the upstream zone being with no barrier to liquid to be filtered, a first sealing (21) blocking direct entrance of fluid into at least one edge of the downstream zone, a second sealing (20) positioned upstream of the first sealing and downstream of at least one layer of the first filtration medium or the spacer medium, the second sealing blocks direct entrance of fluid into at least one edge of a layer of the first filtration medium or the spacer medium, bypass space (15) upstream of the first sealing or the second sealing to allow liquid to exit or enter the edges of the first filtration medium or the spacer medium, wherein fluid to be filtered can enter into the filter through the at least one edge of the first filtration medium (fig. 1, 3, 5, col. 1, lines 21-25, lines 45-50, col. 2, lines 19-36).

Claims 107, 108, 110, 132-134, 112, 113, 115-117, 119 and 120, Hunter '897 further teaches at least one additional sealing with a distance to the first and second sealing, and wherein the at least one additional sealing seals one or more of the edges of the layers of first filtration medium (fig. 4); the sealings are part of an end cap (4) and the end cap provides open spaces comprising bypass spaces between the sealings, such that filtered fluid can enter into the bypass spaces and further downstream in the filter can enter into the first filtration medium (fig. 5, col. 4, lines 12-25); the first filtration medium and the spacer medium have pores and the pores of the spacer medium are larger than the pores of the first filtration medium (col. 2, lines 19-36); at least one layer of a second filtration medium (col. 2, lines 19-36); the at least one layer of a second filtration medium comprises a plurality of layers of the second filtration medium, each

layer having a filtration area and at least one edge, where the plurality of layers of the second filtration medium or the second spacer medium are positioned in an alternating structure with the first filtration medium and the spacer medium with the filtration area facing towards each other and the first filtration medium and the spacer medium are located in one zone of the filter and the second filtration medium is located in a more upstream zone of the filter in an alternating structure of second filtration medium and second spacer medium with the filtration area facing towards each other (fig. 1-5, col. 2, lines 19-36); the pores of the first filtration medium are smaller than the pores of the second filtration medium (col. 2, lines 19-36); the first filtration medium is cellulose (col. 1, lines 45-50); the first spacer medium is cellulose (col. 1, lines 45-50); the filter further comprises at least one perforated core (1) (fig. 1); the core is metal (col. 3, lines 11-15); the at least one first filtration medium and the at least one spacer medium are overlying one another and spirally surrounding the central core (col. 1, lines 45-50); and the downstream zone of the first filtration medium forms a zone adjacent to the core of at least one round of the first filtration medium (fig. 1).

Claim 125, the filter house of Hunter '897 would inherently comprise at least one entry port for the contaminated fluid to enter and at least one exit for the clean fluid to exit.

Claim 136, Hunter '897 teaches a method of producing a filter, the method comprising, providing a plurality of layers of a first filtration medium with a filtration area and at least one edge, providing a plurality of layer of a spacer medium with a filtration area and at least one edge, organizing the layer of the first filtration medium and the

layers of the spacer medium with the filtration area of the first filtration medium and the filtration area of the spacer medium facing towards each other to acquire alternate layers of the first filtration medium and the spacer medium and with at least one layer of the first filtration medium having a downstream zone located at a most downstream part of the filter, sealing an edge of at least the most downstream layer of the downstream zone with a first sealing (21), such that the first sealing blocks direct entrance of liquid to be filtered into the edge of the first filtration medium of the downstream zone, sealing at least the edge of one layer of the first filtration medium or the spacer medium with a second sealing (20) in a position upstream of the first sealing and hereby obtaining a filter, providing bypass space (15) upstream of the first sealing or second sealing to allow liquid to exit or enter the edges of the first filtration medium or spacer medium and not providing the filter with a liquid impermeable layer (6) around the filtration area of the layers of the first filtration medium and the layers of the spacer medium (fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 109 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter '897 and Hunter et al. US 2 537 898.**

Claim 109, Hunter '897 teaches the filter of claim 108 but does not teach the end cap further comprises perforations.

Claim 121, Hunter '897 teaches the end cap is closed in the area of the downstream zone but does not teach the area outside of the inner zone being perforated.

Hunter '898 teaches a filter with an end cap comprising perforations (10) in an area upstream of a sealing (12), such that contaminated fluid can run through the perforations before entering the filtration medium or spacer medium (fig. 1). The claim would have been obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

6. Claim 123 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter '897.

Hunter '897 teaches the filter house of claim 135 but does not teach two filter cartridges. Providing two filter cartridges in a housing is known in the filter art to increase capacity and surface area of a filter apparatus and the addition of a second filter cartridge is a mere duplication of parts. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced, *In re Harza*, 124 USPQ 378 (1960).

7. Claim 114 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter '897 in view of Novak US 5 744 406.

Hunter '897 teaches the filter of claim 113 but does not teach the cellulose fibers are made hydrophobic. Novak teaches making cellulose fabrics hydrophobic by treating them with waxes (col. 3, lines 11-21). The claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art, KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (2007). It also would have been obvious because making the filter hydrophobic allows the filter to absorb oily substances.

8. Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter '897 in view of Boogay US 4 299 699.

Hunter '897 teaches the filter house of claim 135 but does not teach the filter house comprises a container with an opening means. Boogay teaches a filter house comprising a container and the container has at least one opening means (25) through which the filter cartridge may be changed (fig. 1). Having the housing with an opening for replacement of the filter cartridge is very well known in the filter art. The claim would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the

teaching of the technique for improvement in other situations, KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (2007).

Response to Arguments

9. Applicant's arguments filed 6/29/09 have been fully considered but they are not persuasive.

Applicant argues that Hunter '897 does not teach the upstream zone with no barrier to liquid to be filtered or a bypass space upstream of the first sealing and/or the second sealing. Hunter '897 teaches an upstream zone at (7) that does not provide a barrier to fluid to be filtered. Also, the spaces (15) constitute bypass spaces where the bypass spaces allow liquid to exit and/or enter the edges of the first filtration medium or spacer medium while bypassing layers of filter material. Also the layer (6) is liquid permeable in that liquid may flow through the holes (7) in the layer (6).

As to the combination of Hunter '897 and Boogay, the combination is proper as Boogay is only relied upon to teach that a filter housing having an opening means to change the filter within the housing is well known in the art. The structure of the filter element is of not consequence as only the structure of the filter housing is referenced in the rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is (571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz
Examiner
Art Unit 1797

/Krishnan S Menon/
Primary Examiner, Art Unit 1797